

Semester 2 Exam Review- Chapter 10**10.1 Adding and Subtracting Polynomials**

Solve using either the Horizontal or Vertical Method.

1. $(12x - 8x^2 + 6) - (-8x^2 - 3x + 4)$

2. $(2x^2 + 9x - 4) + (6x - 3x^2 + 1) - (x^2 + x + 1)$

10.2 Multiplying Polynomials

Find the product for each.

3. $(3x + 4)(x - 3)$

4. $(2x + 3)(5x + 1)$

5. $(x - 4)(5x + 9 - 2x^2)$

10.3 Special Products of Polynomials

Find the product for each. *Remember the special product patterns!*

6. $(2c + 7)(2c - 7)$

7. $(4r - 5)^2$

8. $(\frac{1}{4}p - 7)(\frac{1}{4}p + 7)$

10.4 Solving Polynomial Equations in Factored Form

Solve each equation.

9. $(3x - 8)(x + 5) = 0$

10. $(5x - 20)^2 = 0$

11. $(x - 3)(2x + 5)(5x - 1) = 0$

10.5 Factoring $x^2 + bx + c$

Factor each trinomial.

12. $x^2 + 3x - 18$

13. $x^2 - 17x + 60$

14. $x^2 - 2x - 48$

10.6 Factoring $ax^2 + bx + c$

Factor each trinomial. *Don't forget about the Grouping Strategy!*

15. $2x^2 + 21x - 11$

16. $7x^2 - 4x - 3$

17. $6x^2 - 5x - 21$

Solve the equation by factoring.

18. $y^2 - 7y + 6 = -6$

19. $4n^2 + 2n = 0$

10.7 Factoring Special Products

Factor each expression.

20. $h^2 - 64$

21. $9y^2 + 60y + 100$

22. $2x^2 - 12x + 18$

23. $12 - 27x^2$

10.8 Factoring using The Distributive Property






Factor each expression completely.

24. $24x^3 + 18x^2$

25. $x^3 + 4x^2 + 6x + 24$

26. $2x^3 + 3x^2 - 50x - 75$

FOR ADDITIONAL CHAPTER 6 REVIEW PLEASE REFER TO ANY OR ALL OF THE FOLLOWING:

-  Your classroom notes and examples
-  Corresponding book sections
-  Chapter 10 Review on pages 634 - 636
-  Chapter 10 Test on page 637
-  Chapter 10 Extra Practice Problems on page 806

STUDENTS CAN CHECK ANSWERS IN THE BACK OF THE BOOK. IF ANSWERS ARE NOT AVAILABLE IN THE BACK OF THE BOOK, STUDENTS ARE ENCOURAGED TO USE THE TEACHER BOOK TO CHECK ANSWERS BEFORE TAKING THE SEMESTER EXAM.